2012

LEBANON FIRE DEPARTMENT



ANNUAL REPORT

INTRODUCTION

2012 was another busy year for the Fire Department. While calls for service showed a slight decrease, inspection, prevention, training and other day-to-day activities increased. As our community continues to grow, the Fire Department continues to adjust to meet these demands. I want to thank the men and women of the Lebanon Fire Department for their professionalism and willingness to provide the highest level of Emergency Services to our community!

In addition to daily call activity the City continues to experience numerous weather related events. 2012 was no exception as the city experienced several heat waves and skirted the effects of another major hurricane. Our past preparedness activities paid huge dividends and allowed the city to respond seamlessly and assist in the recovery efforts. All businesses affected by Tropical Storm Irene in 2011 have re-opened and the retail area in West Lebanon is once again thriving. I offer special thanks to our fire prevention division for their hard work and patience in assisting businesses, existing and new business owners!

For the 4th consecutive year department Paramedics, in conjunction with school district personnel administered in school seasonal flu vaccinations to over 400 children in the Lebanon School District.

Major Incidents in 2012

- February 9th airplane crash with fire killed the lone occupant at the Lebanon Airport.
- May 5th Lucent Drive units responded to an incident involving a chemical reaction in a 55-gallon drum. Units were assisted by the NH State Police Explosive Ordinance Disposal Unit in dealing with the drum.
- August 2nd units responded to a vehicle fire in the parking garage at Dartmouth Hitchcock Medical Center.
- "Super Storm Sandy" Lebanon Emergency Management opened the City's Emergency Operations Center for this event. Fortunately the City experienced very little impact from this storm.

The Lebanon Fire Department is an active, efficient, effective and professional organization within the community. I would like to thank the Lebanon City Council, Mayor, City Manager, City Departments, the residents of the City we proudly serve, and the dedicated members of the Lebanon Fire Department for your support.

Chris Christopoulos, Jr., CFO Fire Chief

ADMINISTRATION

In preparation for the 2013 City Budget the department administration finalized the Fire Department Outcomes. The following are the key goals for 2013:

- Develop and Maintain Heightened Citizen Awareness and Engagement
- Continue to provide "Best in Class" Fire and Emergency Medical Services
- Provide Safety and Security of Life and Property for Building Construction and Occupancy
- Improve Citizen Awareness for Emergency Management

Major Goals for 2013

- ✓ Develop a Citizen Customer Service Survey
- ✓ Develop a self-inspection process for 3 or greater family dwellings
- ✓ Update the City of Lebanon Fire Prevention Code
- ✓ Develop a Capital Improvement Plan for Building Renovations

EMERGENCY ACTIVITY

Our firefighters respond to fires, emergency medical calls, hazardous materials emergencies, auto accidents, fire alarms and other service calls. All of the above

responses require a high level of training and personnel resources. For example, to safely combat a fire in a single family residence we require a minimum of 16 firefighters on scene within 9 minutes. Full-time career personnel provide 24/7 staffing of the stations as follows:

- ➤ Station 1 South Park Street, Lebanon 1 Captain, 1 Lieutenant and 2 Firefighters
- ➤ Station 2 Main Street, West Lebanon 1 Lieutenant and 1 Firefighter
- ➤ Station 3 Route 4, Lebanon no staffing



There are a total of 24 Career Firefighters (1 vacancy remains as of December 31, 2012), 2 Fire Inspectors, 1 Fire Chief, 1 Assistant Fire Chief, 1 Department Administrative Assistant, 12 paid on Call Firefighters and 10 Support Staff.

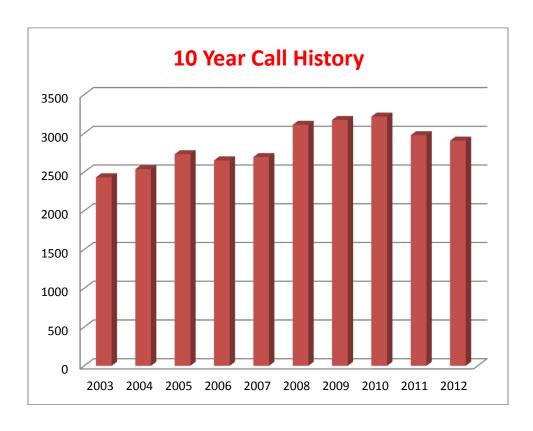
The Department responded to 2,906 calls for service, which represents a 6% decrease over 2011. There were a total of 95 fires (building, vehicle, brush, cooking, etc.) with an estimated dollar loss of \$434,600 and dollars preserved/saved of \$7,891,000. Fires accounted for 3.3% of our total calls for service.

In 2012 we responded to 1,959 EMS incidents. 86% were within City limits, 11% were within our contracted towns of Enfield and Plainfield, 2% were to Hartford and Hanover, and the final 1% a small mix of other communities. The total revenue for ambulance services for 2012 was \$677,450 or an 8.9% over 2011.

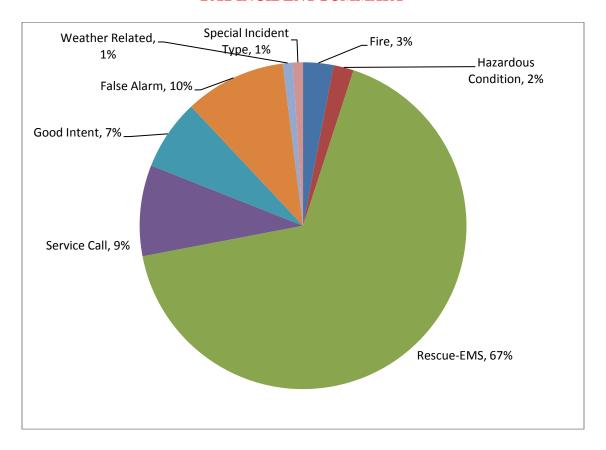
Of the patients we made contact with, 57% reside within the City of Lebanon, 10% reside in our contracted towns of Enfield and Plainfield, 6% were from Hartford and Hanover, and the remaining 23% were from other communities including out of state and out of the country.

Our average response time for EMS calls city-wide is just under 5 minutes with 90% of our calls being answered in less than 8 ½ minutes. Our average response time to all other incidents was 5 minutes 20 seconds.

In addition to fire and EMS calls, the public relies on the Fire Department to assist them when they have a problem. 18% of our total calls for service are classified as good intent or service calls. Some examples include: hazardous conditions, fuel spills, carbon monoxide incidents, downed power lines, water removal, and smoke conditions.



2012 INCIDENT SUMMARY



During the year the Fire Department had 821 instances in which there were multiple calls for service being handled at the same time within the City. Our region relies heavily on mutual aid services to provide firefighter and public safety for fire incidents and for additional resources when the City has multiple calls. During the year the City received mutual aid a total of 34 and provided mutual aid a total of 263 (220 or these were EMS calls under contract to Plainfield and Enfield) and provided 25 Paramedic ALS Intercepts.

OPERATIONS

All individual divisions under department operations report directly to Assistant Chief Jeffrey Libbey.

Emergency Medical Service

This division is headed by Captain Andrew White. The capabilities of our Emergency Medical Services (EMS) operation during 2012 were enhanced significantly through several quality improvement initiatives.

Before discussing progress, we need to reflect on what we lost in 2012.

Norman Yanofsky, MD served as the department's medical advisor for more than two decades. This year Norm made the decision to retire from both his role as an Emergency Physician at DHMC as well as the Region's medical director. Over the years Norm played a critical role in evolving prehospital medicine in the State, from very basic transportation with only simple first aid being provided, to a fully integrated Advanced Life Support system that saves lives every day. Norm encouraged Paramedic level care in the area and personally mentored countless Paramedics, including many past and present Lebanon Firefighters. For his dedication to the system which serves our residents and visitors so well, we owe Norm our most sincere thanks.

With Norm's departure, DHMC hired Thomas W. Trimarco, MD to serve as the EMS Medical Director. Dr. Trimarco has served within the EMS system as a pre-hospital care provider as well as a Medical Director for multiple agencies including the Cincinnati Fire Department. He is board certified in Emergency Medicine and has a strong interest in advancing pre-hospital Emergency Medical Services. We look forward to working with Dr. Trimarco to build on the strong foundation already in place.



In 2012 about half of the Fire Department's members completed all professional development required by the National Registry of EMT's – the Certifying body for EMS Professionals. The Certification is valid for two years after completion providers are able to renew their State License to provide pre-hospital medical care. The balance of the members will go through the same process next year.

The Fire Department took delivery of and Paramedics received training on three new Intravenous Infusion pumps. The pumps were acquired in a cooperative cost sharing agreement with Alice Peck Day Memorial Hospital. With the addition of the pumps to the ambulances, additional medications can be administered to the patient – enhancing the quality and accuracy of pre-hospital care.

Speaking of new deliveries, "Ambulance 1" was approved for purchase by the City Council in December 2011 and we took delivery in the Fall of 2012. The ambulance replaced an aging and unreliable unit that was traded in.



The Fire Department takes considerable pride in our ability to provide high quality prehospital care to those in need. In that pursuit we have an internal quality improvement (QI) program which has been evolving over a period of years. We have made several enhancements in 2012 with additional layers of review, better provider feedback, and improved coordination with our Medical Director. We will continue to enhance the program in 2013 with mandatory Medical Director review on several types of calls – the process will enable more oversight on high acuity low frequency events and will help focus training needs going forward. The process will be more time consuming in house but the benefits of the work clearly are worth the extra effort.

DHMC began an Emergency Residency program in mid 2012. The Fire Department is working cooperatively with the program to offer exposure to the pre-hospital environment to the 6 residents; in exchange DHMC will begin to offer continuing medical education to our EMS providers and work with us on quality improvement and research efforts. I am confident the shared experiences will only make our collective system stronger for the people we care for.

Advanced Life Support was provided to 57% of the patients transported and Basic Life Support to 43%. Overall we transported a total of 1503 patients, 87% to DHMC, 9% to APD, and the balance to the White River Junction VA Hospital and other miscellaneous destinations. 30% of this year's calls did not result in transport to the hospital.

\$800,000.00 \$700,000.00 \$500,000.00 \$400,000.00 \$200,000.00 \$100,000.00 \$0.00 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012

10 Year Ambulance Revenue

Training

The training division is headed by Assistant Chief Jeffrey Libbey and Captain Jeffrey Egner.

The training division had an unusually busy year. In January the department held Hazardous materials training, particularly the Emergency Response guide book.

The below bulleted items show the discipline area that the firefighters took for training:

- The two fire inspectors trained on Fuel gas systems
- ➤ Three firefighters trained to become Ice Rescue Technicians
- ➤ Assistant Chief and Inspectors attended training on NFPA 1 and 101 Code changes
- ➤ One firefighter attended firefighter 2 Rescue skills module
- ➤ One firefighter attended Rural water supply
- ➤ Three firefighters attended Fire Emergency Instructor
- ➤ Two Firefighters attended Fire Officer 1
- Captain White attended EMS Education Standards Workshop
- ➤ Firefighter Greene attended Hands on Fiber training for Fiber Optic
- Sixteen Lebanon Firefighters attended LNG flammable gas class
- Six firefighters performed a table top exercise for Airport operations
- Chief and Assistant Chief attended all day workshop at New Hampshire Fire Academy



In 2012 both the Chief and Assistant Chief have been enrolled in the City of Lebanon

2012 Management and Leadership Development program. This program is a two year long program consisting of six required core courses and four electives in either management or leadership.

In June of 2012, the Fire Chief was selected and began graduate course work through the Naval Post Graduate School's Center for Homeland Defense and Security. This program is a mixture of in-residency and online course work with a focus on Homeland Security and Emergency Management. All program costs including books, tuition, travel, lodging and meals are fully funded by the US Department of Homeland Security.

Late November the State of New Hampshire Fire Academy received approximately 4.8 million dollars of unexpended grant monies from the State Homeland Security Grant program to utilize for fire, rescue and incident command training.

The Lebanon Fire Department took full advantage of the funding and most of the firefighters participated in training.

The following is a list of the classes that the Lebanon Firefighters participated in and the contact hours for the class.

- ➤ 9 attended confine space (229.5 hours)
- > 5 attended trench rescue (170 hours)
- ➤ 9 attended Hazmat Technician (720 hours)
- ➤ 1 attended Incident Command System (9 hours)
- ➤ 1 attended Rescue Systems 1 (40 hours)
- ➤ 1 attended Rescue Systems 2 (45 hours)
- 2 attended Rope Operations (85 hours)



- ➤ 3 attended Rope Technician (135 hours)
- ➤ 9 attended Swift Water Operations (252 hours)
- ➤ 9 attended Swift Water Technician (252 hours)
- ➤ 1 attended Resource Inventory (8.5 hours)
- > 7 attended Fire Ground Safety and Survival (218 hours)
- ➤ 1 attended Introduction to Rescue Systems (40 hours)

The total number of contact hours for a two month period for training was 1,952 total grant funded training hours and \$105,000 in grant training overtime and backfill reimbursement.

Fire Alarm

The Fire Alarm Division is headed by Captain Jeffrey Egner.

In 2012 the Lebanon Fire Department Fire Alarm Division worked toward streamlining its operation. In doing so, Captain Egner took over the administrative duties of the fire alarm technician, freeing him up to perform more hands on tasks in the field. The department also sent Captain Egner to the International Municipal Signal Association's school to become certified as a municipal fire alarm technician, Level I.

Throughout the year, we installed 6 new municipal alarm boxes on 3 existing buildings and 3 newly constructed buildings within the City. There were also 3 emergency repairs conducted on the municipal copper circuitry due to either construction mishaps of digging up underground cables, or overhead lines being pulled down by vehicles.

At the request of Public Works, a new fiber optic cable was strung from City Hall to the GAR Soldier's Memorial building so that the heating plant could be monitored by Honeywell.

An update and overhaul of the Masterbox inspection, maintenance, and testing worksheets was completed to facilitate a more easy and streamlined approach to quarterly testing of the system.

Some of the services that needed to be contracted outside of the department were the removal of the fiber optic junction box at the School Street School prior to the sale of the building to maintain the emergency communication systems for both Police and Fire.

With the upcoming sale of more school district property, these services will need to be sought again to maintain the continuous integrity of the fiber optic system. There have also been numerous pole changes that were contracted out due to the size and placement of new utility poles. Our current fire alarm truck is being quickly forced into retirement as the length of the boom is not sufficient to perform the daily operations of simple tasks such as pole changes.

The outlook for 2013 shows multiple large scale developments within the City, which will require expansion of the existing system. Among them are: Altaria (Centerra Business Park), Iron Horse, Riverside Park, Rivermere, and Prospect Hill Development.

Other fiber optic projects in need of attention would be the extension of the fiber optic system to Sachem Village to provide a more reliable link for the emergency communications radio system for Police and Fire. Also, the repair and reconnection of the copper cable between the scale house to the maintenance garage at the landfill.

Building Maintenance

The Building Maintenance Division is headed by Captain James Wheatley.

It has been another long year for building maintenance. Numerous repairs and energy efficiency updates challenged this division throughout the year. The following are improvement efforts that were accomplished in 2012.

A new tank less hot water system was installed in Station 1 which is powered by propane. This allowed us to shut our oil powered boilers off in the spring and summer months which should lead to a significant energy cost savings in regards to heating oil.

The apparatus floor at station one was completely re-painted with a stain and slip resistant epoxy paint.

An automatic closing feature was installed on all of our apparatus bay doors. This feature allows quicker response times by not having to stop and make sure the door closes, but also will assure doors close in a timely manner in the winter months. This is an energy savings improvement.

Station 3 was cleaned out and reorganized to allow for the storage of MCI equipment and spare apparatus.

A new propane line was installed to consolidate the emergency generator and all of the Station 1 propane appliances into one tank.

Ceiling outlets were installed in the training room for the EOC, 2 new overhead projectors were installed in the training room for use by the EOC.

This building continues to need many upgrades and repairs due to its age and extensive use. We are quickly out growing the facility and being forced to store items off site.

Apparatus Maintenance

The Vehicle Maintenance Division is headed by Captain Chris Simon.

This report is a general overview of fleet maintenance work as completed by either the Department or outside vendors in 2012. Due to an aging fleet and the need for numerous major repairs, vehicle maintenance costs have increased greater than 45% over the last two budget years.

Car #1 a 2009 Ford Taurus used by Department Chief. Regular maintenance and services, no major mechanical issues and tires were replaced.

Car #2 a 2008 Ford Taurus used by Department Assistant Chief. This vehicle also serves as a transportation unit for member's attending outside training classes. Regular maintenance and services performed. Replacement of low tire pressure sensors and tires were replaced.

Car #3 a 2007 Ford Expedition used by Fire Inspection. Regular maintenance, front suspension, brakes, exhaust, tires replaced and engine tune up completed this year.

Car #4 a 2008 Ford Escape used by Fire Inspection and for Firefighter travel to and from training courses as needed. Regular maintenance, brakes, engine and exhaust system repairs and tires replaced.

Utility #1 a 2011 Ford F-350 Pick-up Truck used by Station#1 personnel. This vehicle serves as a first response vehicle, personnel transport, hauling and towing unit. Regular maintenance, and a manufacturer recall repair to emission control system monitor. Tail pipe fitted with tip for Plymo-vent system.

Utility #2 a 1990 Ford F-350 Bucket truck serves as the primary vehicle for fire alarm and communications system maintenance and is also used by all City Departments. Regular maintenance, brake, engine, exhaust, transmission, electrical and hydraulic lift system repairs and new tires. Annual service inspection of the lift system was also completed.

Engine #1 a 2000 American LaFrance Fire Engine. Regular maintenance, brake and suspension, electrical system, pump piping and pump components were repaired this year. Also On-Spot chain system repairs and replacement parts. The pump compartment heater was replaced. Mounting system for an on board I-pad computer was added. The water tank level gauge was replaced this year.

Engine #2 a 2007 E-One Fire Engine. Regular maintenance, brake and suspension, electrical system, pump piping and pump components were repaired this year. Also On-Spot chain system repairs and replacement parts. Mounting system for an on board I-pad computer was added.

Engine #3 a 1986 3-D Fire Engine. This Engine is a reserve Engine and does not get regular day to day use. Therefore its repair needs are much less than the other primary usage Engines. Regular maintenance, On-Spot chain system repairs and replacement parts. This vehicle is due to be removed from service in 2013.

Engine #4 a 1995 Smeal Fire Engine. Regular maintenance, major over haul and servicing of the fire pump this year. Repaired and scheduled replacement of quick dump valve on the rear of the Engine. Rebuilding of several valves on the fire pump was also completed this year.

Ladder #1 a 1990 E-One Ladder truck. Regular maintenance, annual testing of aerial ladder and all ground ladders was completed. Replacement of several micro-switches and electrical system repairs were also completed this year.

Rescue #1 a 1991 Ford L-8000 E-One Rescue truck. Regular maintenance and no major repairs needed this past year.

Ambulance #1 a 2012 Ford F-550 Lifeline Ambulance. This unit was received new and placed into service to Lebanon in November, 2012. Regular maintenance, winter tires purchased and placed on the unit for winter usage. Shortly after delivery the A/C Compressor malfunctioned and required replacement. This repair was covered by warranty by the chassis manufacture.

Ambulance #2 a 2008 Ford E-450 Road Rescue Ambulance. This unit was formally Ambulance#1. Regular maintenance, brake & suspension, exhaust, engine and transmission repairs. On-Spot chain system repairs and replacement parts.

Ambulance #3 a 2003 Ford E-450 Road Rescue Ambulance. This ambulance is the oldest in the ambulance fleet and is need of replacement. Regular maintenance, brake and suspension, steering components replaced, cooling system over haul and replacement parts, engine, transmission and electrical system repairs were all done this past year. Onspot chain system was in need of a complete repair which was done.

Gator #1 a 2010 John Deere Utility Vehicle. This unit is used for wild land fire suppression, back country search and rescue missions, as well as any off road or limited access situation as encountered and needed by our personnel or other departments. Regular maintenance and repairs to the cooling system was completed this year.

Boat #1 a 2010 model year Zodiac Rescue Boat. This is used for water emergencies on water ways in Lebanon. Regular maintenance was completed this past year.

All vehicles were registered and had State of New Hampshire vehicle inspections completed. Fire apparatus are on a bi-annual inspection schedule as required. All Fire Engine Fire Pumpers were tested by an outside service and passed. All Department ground ladders and aerial ladder were tested by an outside service and all passed.

The Fleet Maintenance Division is also tasked with maintaining and repairing all hand and power tools. Below are the most notable actions taken this past year.

Annual testing, servicing and repairs to the hydraulic extrication tools was performed. Several of these tools needed extensive servicing and repairs. Replacement tools were loaned by the servicing agency so at no time were we without these life saving tools. Several chain saws, generators and other mechanic tools were sent out and serviced this past year. All hand tools were checked for defects and repaired or replaced as needed.

Progress continues on the computerization of all maintenance records and servicing needs. This will allow for all personnel to quickly identify, notify and schedule repairs and check for completion of such.

FIRE PREVENTION

2012 was another busy year for the Fire Prevention Bureau.

Primary work activities were recorded in the following categories: Plan reviews/permitting; inspections; consultations; public education and drills; legal notices /violations and investigations.

Fortunately, there were no fire fatalities in Lebanon in 2012 and there were no major monetary loss fires in the Cityr. The Fire Prevention Bureau was involved in investigating 15 fire incidents during the year. The causes for these fires included: Accidental; intentional/arson; cooking; careless disposal of smoking materials and electrical malfunction. Two of the intentionally set fires were caused by juveniles.

The youths involved in those fire incidents were referred into the Department's Juvenile Firesetter Intervention Program by the Lebanon Police Department and the Lebanon District Juvenile Court. The New Hampshire Juvenile Justice Department, Lebanon Police Department and West Central Behavioral Health continue to actively participate in this Program and provide valuable resources in our efforts to reduce recidivism rates of juveniles misusing fire.

Several large commercial building projects were completed in 2012 which necessitated significant man-hours for plan reviews and inspections. Some examples of these projects are: The new Lebanon Middle School; APD renovations; DHMC Medical Office Building; DHMC Advance imaging Center; Merck Pharmaceutical Company; Geisel Medical School; Brady Sullivan Development; Thermal Dynamics Renovations; Hypertherm Manufacturing; Moe's Southwest Grill; Five Guys Burgers; Kay Jewelers; K-Mart Renovations and Repair and Renovations to Sears and JC Penney.

The Bureau worked with several agencies in the permitting process for mitigating environmental contamination issues involving leaking underground fuel tanks at several locations. The Bureau also assisted a local propane distributor in the processing and granting of a variance from the State Fire Marshal's Office relative to non code compliant underground propane tank installations. Another propane distributor was assisted in the permitting process and in the development of an action plan for a rail based propane offloading operations.

Fire safety education was delivered to several different groups and agencies in 2012. The delivery of this education ranged from assisting facilities in revising or creating emergency operations plans to performing evacuation drills. Several live fire extinguisher training classes were also offered to business groups in the City. New fire safety themed board games were delivered to all the third grade classes in the City during Fire Prevention Week. The Department and the Fire Firefighters Union held the 4th consecutive year of a fire safety fair held at the Lebanon High School. The Event was well attended and several citizens received CPR instruction as a new offering at the Event.

Approximately 45 smoke alarms were given out to residents in need during the year. Continuing education for the inspectors included training on changes to the New Hampshire State Fire Code, recertification for Fire Investigation Technician, certification for Juvenile Fire setter Intervention Specialist II and certification for Fire Inspector II.

Violation/legal Responses education/drills Fire Investigations 2% 1% Consults 25%

Summary of Fire Prevention Activities

EMERGENCY MANAGEMENT

The Lebanon Fire Department provides coordination for all activities related to the City of Lebanon Emergency Management Program and the Emergency Operations Center (EOC). The City's EOC is housed at the Lebanon Fire Department, Station 1 and serves as a command and control center in the event of a major incident. Chief Christopoulos serves as the Emergency Management Director (EMD) and is backed-up by Police Chief

Plan Review 16%

James Alexander and Assistant Fire Chief Jeffrey Libbey as Deputy EMDs. Emergency Management is responsible for the overall emergency preparedness of the City of Lebanon in the event of a natural or manmade emergency and for maintaining the City Emergency Operations Plan.

The Lebanon Emergency Operations Plan establishes a framework for City government to provide assistance in an expeditious manner to save lives and to protect property in the event of a disaster. The City completed revisions to the Emergency Operations Plan and



held a workshop for all key City employees with assigned roles in the plan.

The purpose of the Emergency Operations Plan is to facilitate the delivery of all types of emergency response and to help deal with the consequences of significant disasters. The Plan outlines the planning assumptions, policies, concept of operations, organizational structures and specific assignments of responsibility to the City departments and agencies involved in coordinating the Local, State and Federal response activities.

The Emergency Management Director also represents the City as the regional point of contact in our Public Health Emergency Planning. The region has worked over the last 10+ years to develop a comprehensive response plan for dealing with public health emergencies. The City hosts the Regional Coordination Center for coordinating the region's response. This system was tested during the 2009 H1N1 Flu Pandemic.